

**PATENT COOPERATION TREATY**

From the  
INTERNATIONAL SEARCHING AUTHORITY



**PCT**

WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY

(PCT Rule 43bis.1)

To: <b>SHIGA Masatake</b>  104-8453 2-3-1 Yaesu , Chuo-ku , Tokyo
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Date of mailing (day/month/year)		<b>29. 6. 2004</b>
<b>FOR FURTHER ACTION</b> See paragraph 2 below		
Applicant's or agent's file reference <b>PC-9094</b>	International application No. <b>PCT/JP2004/004959</b>	International filing date (day/month/year) <b>06.04.2004</b>
Priority date (day/month/year) <b>07.04.2003</b>		
International Patent Classification (IPC) or both national classification and IPC Int.Cl' <b>G11B5/66</b>		
Applicant <b>SHOWA DENKO K.K.</b>		

1. This opinion contains indications relating to the following items:

- Box No. I Basis of the opinion
- Box No. II Priority
- Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- Box No. IV Lack of unity of invention
- Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- Box No. VI Certain documents cited
- Box No. VII Certain defects in the international application
- Box No. VIII Certain observations on the international application

2. FURTHER ACTION

If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

Name and mailing address of the ISA/JP  <b>Japan Patent Office</b>  3-4-3, Kasumigaseki, Chiyoda-ku, Tokyo 100-8915, Japan	Authorized officer  <b>KURANO MASAAKI</b>  Telephone No. +81-3-3581-1101 Ext. 3551	<b>5D 8721</b>
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WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY

International application No.

PCT/JP2004/004959

Box No. I Basis of the opinion

1. With regard to the language, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

This opinion has been established on the basis of a translation from the original language into the following language \_\_\_\_\_, which is the language of a translation furnished for the purposes of international search (under Rules 12.3 and 23.1(b)).

2. With regard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:

a. type of material

- a sequence listing  
 table(s) related to the sequence listing

b. format of material

- in written format  
 in computer readable form

c. time of filing/furnishing

- contained in the international application as filed.  
 filed together with the international application in computer readable form.  
 furnished subsequently to this Authority for the purposes of search.

3.  In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.

4. Additional comments:

WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY

International application No.  
**PCT/JP2004/ 004959**

Box No. V

Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Claims Claims	<u>1-14</u>	YES NO
Inventive step (IS)	Claims Claims	<u>1-14</u>	YES NO
Industrial applicability (IA)	Claims Claims	<u>1-14</u>	YES NO

2. Citations and explanations

Document1:JP 2001-56921 A (FUJITSU K.K.) 2001.02.27

Document2:JP 2000-222715 A (SHOWA DENKO K.K.) 2000.08.11

In the document No.1 , a magnetic recording medium comprising at least a non-magnetic undercoat layer , a first magnetic layer , a non-magnetic coupling layer , a second magnetic layer , and a protective layer , in this order , on a non-magnetic substrate , wherein the second magnetic layer is anti-ferromagnetically coupled with the first magnetic layer is shown .

In the document No.2 , a various kinds of alloy are shown including CoCrZr alloy is shown.

Take it into consideration that there are not enough comparative examples and it's not proved that the CoCrZr alloy is the best choice in the known various kinds of alloy , it's easy for the person skilled in the art to exchange the alloy used in the magnetic recording medium shown in the document No.1 to the alloy shown in the document No.2 .